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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/753,134	12/29/2000	Gary L. Shanklin	659/766	1798

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EXAMINER

SALVATORE, LYNDA

ART UNIT PAPER NUMBER

1771

DATE MAILED: 02/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/753,134

Applicant(s)

SHANKLIN, GARY L.

Examiner

Lynda M Salvatore

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6, 10-20, 22 and 35-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 10-20, 22 and 35-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other:

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's request for continuing examination (RCE), accompanying amendments, remarks and inventor declaration filed on 11/24/03 have been fully considered and entered. Claims 1,5,10,20, and 22 have been amended, claims 7-9 and 21 have been cancelled and new claims 35-47 have been added as requested. With regard to the PCT publication WO 99/37860 issued to Goulet et al., Applicant's submitted inventor declaration disqualifies this reference as 102(a) art. Thus, claims 1-3 and 5-22 rejected under 35 U.S.C. 103(a) as being unpatentable over Rothe et al., US 4,738,847 in view of Goulet et al., WO 99/37860 as set forth in section 4 of the last Office Action is hereby withdrawn. Applicant's amendments to claim 1 is found sufficient to overcome the rejection of claims 1-8,13,14,18,19,20-22 rejected under 35 U.S.C. 103(a) as being unpatentable over Rothe et al., in view of Roe et al., US 5,635,191 as set forth in section 5 of the last Office Action. Specifically, the combination of Rothe et al., and Roe et al., fails to teach or suggest the amine-modified polysiloxane composition having the formula shown in newly amended claim 1. Thus, this rejection is hereby withdrawn. Despite this advance, however, Applicant's amendments are not found patentably distinguishable over the prior art of Rothe et al., US 4,738,847 in view of Goulet et al., US 6,054,020 and as such a new ground of rejection is set forth herein below.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

Art Unit: 1771

having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1-3 5,6, 10-20,22 and 35-47 and are rejected under 35 U.S.C. 103(a) as being unpatentable over Rothe et al., US 4,738,847 in view of Goulet et al., US 6,054,020.

The patent issued to Rothe et al., discloses a multi-ply absorbent article comprising a virucidal composition confined to the inner layer of the product (Abstract). Preferably the absorbent article comprises three plies, wherein the inner or middle layer further comprises a virucidally effective amount of a virucidal composition (Column 1, lines 22-35). Rothe et al., teaches applying the virucidal composition to the inner ply layer to reduce any irritation that may result from having the virucidal composition present on the surface of the article (Column 2, lines 10-20). The plies may be made from webs of cellulosic creped wadding, however, non-woven webs synthetic polymeric fibers are also suitable (Column 2, lines 47-54). The three-ply absorbent article is suitable for use as facial tissues, bathroom tissues, paper towels or wipes (Column 1, lines 36-39). Suitable virucidal compositions include acids having the formula  $R-COOH$ , wherein R is selected from the group of lower alkyl; substituted lower alkyl; carboxy lower alkyl or carboxy dihydroxy (Column 1, lines 40-60).

Rothe et al., fails to teach applying a siloxane compound to at least a portion of said outer plies, however, the patent issued to Goulet et al., discloses applying an amine-modified polysiloxane to the outer surfaces of a three-ply tissue product (Abstract). The general formula of the amine-modified polysiloxane is that of the Applicant's structure shown in claim 1 (Column 3, lines 20-50) wherein,  $R_1-R_9$  moieties can be  $C_1$  or greater alkyl substituents.  $R_2-R_5$  can be hydroxy or  $C_1$ , or greater alkyl alcohol substituents.  $R_{10}$  can include any amine-related functional groups (Column 3, lines 20-30). To balance the hydrophobicity Goulet et al., teaches

Art Unit: 1771

blending a modified polysiloxane having the Applicant's structure depicted in claim 1, with the amine-modified polysiloxane (Column 3, lines 40-45), wherein x and y are integers > than 0. The mole ratio of x to (x + y) can be from .005% to about 25%.  $R_1$ - $R_9$  moieties can be  $C_1$  or greater alkyl substituents.  $R_2$ - $R_5$  can be hydroxy or  $C_1$ , or greater alkyl alcohol substituents.  $R_{11}$  can include functional groups such as ether, polyether, ester, amine, imine, amide as well as alkyl and alkenyl analogues (Column 3, lines 50-60). For example  $R_{11}$  can be a polyether functional group of the generic form  $R_{12}-(R_{13}-O)_a-(R_{14}-O)_b-R_{15}$ ; wherein  $R_{12}$ ,  $R_{13}$  and  $R_{14}$  are alkyl chains of  $C_1$  or greater,  $R_{15}$  can be hydrogen or  $C_1$ - $C_4$  alkyl group and "a" and "b" can be integers from 1-100 (Column 3, lines 60-65). Goulet et al., teaches the amine-modified polysiloxane to the surfaces of the tissue product to impart softness and a degree of hydrophobicity to prevent wet through of liquids during use (Column 1, 25-30).

With regard to claims 15-19, and 36-38 the prior art happens to teach several of the claimed final products such as tissues, paper towels, and wipes, however, these use limitations recited in the claim are not given patentable weight at this time since the prior art *meets* the structural and chemical limitations. In other words, as recited, any multi-ply absorbent article having the claimed property limitations could function in the desired capacity since there are no *other* structural and/or chemical distinguishing features used to define the facial tissue, bath tissue, paper towel, diaper, or sanitary napkin.

Therefore, motivated to impart softness and a degree of hydrophobicity to a virucidal multi-ply absorbent article it would have been obvious to having ordinary skill in the art at the time the invention was made to treat the surface ply of the multi-ply virucidal absorbent article of Rothe et al. with the amine-modified polysiloxane composition taught by Goulet et al.

Art Unit: 1771

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rothe et al., US 4,738,847 in view of Goulet et al., US 6,054,020 as applied to claim 2 above and further in view of Roe et al., US 5,635,191.

The combination of prior art of Rothe et al., and Goulet et al., fail to teach a liquid-impermeable base ply, however, the patent issued to Roe et al., discloses a disposable diaper comprising a liquid pervious top sheet having a fluid polysiloxane emollient/ lotion applied to the surface thereof (Abstract). The diaper construction generally includes the polysiloxane containing top sheet, an absorbent core, and a liquid impervious back sheet (Column 4, lines 18-24). Roe et al., discloses that the absorbent capacity of the core may be tailored suit a variety personal care needs such as diapers, sanitary napkins and incontinence pads (Column 5, lines 1-5).

Therefore, motivated by the desire to produce a virucidal disposable absorbent article it would have been obvious to one having ordinary skill in the art to provide the multi-ply article of Rothe et al., and Goulet et al., with a liquid-impermeable base ply as taught by Roe et al.

#### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynda M Salvatore whose telephone number is 571-272-1482. The examiner can normally be reached on M-F.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1482. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Art Unit: 1771

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-0994.

February 4, 2004

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CHERYL A. JUSKA  
PRIMARY EXAMINER